```
Welcome to STN International! Enter x:x
LOGINID:ssspta1641cxc
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
      * * * * * * *
                     Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS 1
NEWS 2
                 "Ask CAS" for self-help around the clock
 NEWS
                 IPC search and display fields enhanced in CA/CAplus with the
     3 DEC 21
                 IPC reform
      4 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
 NEWS
                 USPAT2
NEWS
      5 JAN 13
                 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 6 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                 INPADOC
                 Pre-1988 INPI data added to MARPAT
      7 JAN 17
NEWS
NEWS 8 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 9 JAN 30 Saved answer limit increased
NEWS 10 JAN 31 Monthly current-awareness alert (SDI) frequency
                 added to TULSA
NEWS 11 FEB 21
                 STN AnaVist, Version 1.1, lets you share your STN AnaVist
                 visualization results
NEWS 12 FEB 22
                 Status of current WO (PCT) information on STN
NEWS 13 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 14 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 15 FEB 27
                 New STN AnaVist pricing effective March 1, 2006
NEWS 16 FEB 28
                 MEDLINE/LMEDLINE reload improves functionality
NEWS 17 FEB 28 TOXCENTER reloaded with enhancements
NEWS 18 FEB 28
                 REGISTRY/ZREGISTRY enhanced with more experimental spectral
                 property data
NEWS 19 MAR 01
                 INSPEC reloaded and enhanced
NEWS 20 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 21 MAR 08 X.25 communication option no longer available after June 2006
NEWS 22 MAR 22
                 EMBASE is now updated on a daily basis
NEWS 23 APR 03
                 New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 24 APR 03
                 Bibliographic data updates resume; new IPC 8 fields and IPC
                 thesaurus added in PCTFULL
NEWS 25 APR 04
                 STN AnaVist $500 visualization usage credit offered
              FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
NEWS EXPRESS
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(jp),
              AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
              V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
              http://download.cas.org/express/v8.0-Discover/
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

```
=> file .meeting
```

'EVENTLINE' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE): ignore

'MEDICONF' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):ignore

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

0.21 0.21

FILE 'AGRICOLA' ENTERED AT 16:05:17 ON 05 APR 2006

FILE 'BIOTECHNO' ENTERED AT 16:05:17 ON 05 APR 2006 COPYRIGHT (C) 2006 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CONFSCI' ENTERED AT 16:05:17 ON 05 APR 2006 COPYRIGHT (C) 2006 Cambridge Scientific Abstracts (CSA)

FILE 'HEALSAFE' ENTERED AT 16:05:17 ON 05 APR 2006 COPYRIGHT (C) 2006 Cambridge Scientific Abstracts (CSA)

FILE 'IMSDRUGCONF' ENTERED AT 16:05:17 ON 05 APR 2006 COPYRIGHT (C) 2006 IMSWORLD Publications Ltd.

FILE 'LIFESCI' ENTERED AT 16:05:17 ON 05 APR 2006 COPYRIGHT (C) 2006 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 16:05:17 ON 05 APR 2006
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2006 INIST-CNRS. All rights reserved.

=> N2-Vh-Vl

L1 0 FILE AGRICOLA
L2 0 FILE BIOTECHNO
L3 0 FILE CONFSCI
L4 0 FILE HEALSAFE
L5 0 FILE IMSDRUGCONF
L6 0 FILE LIFESCI
L7 0 FILE PASCAL

TOTAL FOR ALL FILES

L8 0 N2-VH-VL

=> N2-blocked

L9 0 FILE AGRICOLA
L10 0 FILE BIOTECHNO
L11 0 FILE CONFSCI
L12 0 FILE HEALSAFE
L13 0 FILE IMSDRUGCONF
L14 0 FILE LIFESCI
L15 0 FILE PASCAL

TOTAL FOR ALL FILES

L16 0 N2-BLOCKED

```
L17
             2 FILE AGRICOLA
L18
             0 FILE BIOTECHNO
L19
            0 FILE CONFSCI
L20
            0 FILE HEALSAFE
L21
            0 FILE IMSDRUGCONF
             2 FILE LIFESCI
L22
L23
             2 FILE PASCAL
TOTAL FOR ALL FILES
             6 N2 (3A) (BLOCK)
=> dup rem
ENTER L# LIST OR (END):124
DUPLICATE IS NOT AVAILABLE IN 'IMSDRUGCONF'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L24
              6 DUP REM L24 (0 DUPLICATES REMOVED)
=> d l25 ibib abs total
L25 ANSWER 1 OF 6 LIFESCI
                               COPYRIGHT 2006 CSA on STN
ACCESSION NUMBER:
                    2004:62421 LIFESCI
TITLE:
                    The Mad2 spindle checkpoint protein has two distinct
                    natively folded states
AUTHOR:
                    Luo, X.; Tang, Z.; Xia, G.; Wassmann, K.; Matsumoto, T.;
                    Rizo, J.; Yu, H.
                    Department of Pharmacology, The University of Texas
CORPORATE SOURCE:
                    Southwestern Medical Center, 5323 Harry Hines Boulevard,
                    Dallas, Texas 75390, USA.; E-mail: jose@arnie.swmed.edu or
                    Hongtao Yu
SOURCE:
                    Nature Structural & Molecular Biology [Nat. Struct. Mol.
                    Biol.], (20040400) vol. 11, no. 4, pp. 338-345.
                    ISSN: 1545-9993.
DOCUMENT TYPE:
                    Journal
FILE SEGMENT:
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                    English
     The spindle checkpoint delays chromosome segregation in response to
     misaligned sister chromatids during mitosis, thus ensuring the fidelity of
     chromosome inheritance. Through binding to Cdc20, the Mad2 spindle
     checkpoint protein inhibits the target of this checkpoint, the ubiquitin
     protein ligase APC/C super(Cdc20). We now show that without cofactor
     binding or covalent modification Mad2 adopts two distinct folded
     conformations at equilibrium (termed N1-Mad2 and N2-Mad2). The structure
     of N2-Mad2 has been determined by NMR spectroscopy. N2-Mad2 is much more
     potent in APC/C inhibition. Overexpression of a Mad2 mutant that
     specifically sequesters N2-Mad2 partially blocks
     checkpoint signaling in living cells. The two Mad2 conformers interconvert
     slowly in vitro, but interconversion is accelerated by a fragment of Mad1,
     an upstream regulator of Mad2. Our results suggest that the unusual
     two-state behavior of Mad2 is critical for spindle checkpoint signaling.
L25 ANSWER 2 OF 6 LIFESCI
                               COPYRIGHT 2006 CSA on STN
                    2003:72078 LIFESCI
ACCESSION NUMBER:
TITLE:
                    Two Distinct Phases of Virus-induced Nuclear Factor
                    B Regulation Enhance Tumor Necrosis Factor-related
                    Apoptosis-inducing Ligand-mediated Apoptosis in
                    Virus-infected Cells
AUTHOR:
                    Clarke, P.; Meintzer, S.M.; Moffitt, L.A.; Tyler, K.L.
                    Departments of Neurology, Medicine, Microbiology, and
CORPORATE SOURCE:
                    Immunology, University of Colorado Health Science Center,
                    Denver, Colorado; E-mail: Ken.Tyler@uchsc.edu
SOURCE:
                    Journal of Biological Chemistry [J. Biol. Chem.], (20030516
    )
                    vol. 278, no. 20, pp. 18092-18100.
                    ISSN: 0021-9258.
DOCUMENT TYPE:
                    Journal
```

DOCUMENT TYPE: Journal
FILE SEGMENT: V; N
LANGUAGE: English
SUMMARY LANGUAGE: English

Cellular transcription factors are often utilized by infecting viruses to promote viral growth and influence cell fate. We have previously shown that nuclear factor Kappa B (NF- Kappa B) is activated after reovirus infection and that this activation is required for virus-induced apoptosis. In this report we identify a second phase of reovirus-induced NF- Kappa B regulation. We show that at later times post-infection NF-Kappa B activation is blocked in reovirus-infected cells. This results in the termination of virus-induced NF- Kappa B activity and the inhibition of tumor necrosis factor alpha and etoposide-induced NF- Kappa B activation in infected cells. Reovirus-induced inhibition of NF- Kappa B activation occurs by a mechanism that prevents I Kappa B alpha degradation and that is blocked in the presence of the viral RNA synthesis inhibitor, ribavirin. Reovirus-induced apoptosis is mediated by tumor necrosis factor-related apoptosis inducing ligand (TRAIL) in a variety of epithelial cell lines. Herein we show that ribavirin inhibits reovirus-induced apoptosis in TRAIL-resistant HEK293 cells and prevents the ability of reovirus infection to sensitize TRAIL-resistant cells to TRAIL-induced apoptosis. Furthermore, TRAIL-induced apoptosis is enhanced in HEK293 cells expressing I Kappa B[Delta] N2, which blocks NF- Kappa B activation. These results indicate that the ability of reovirus to inhibit NF- Kappa B activation sensitizes HEK293 cells to TRAIL and facilitates virus-induced apoptosis in TRAIL-resistant cells. Our findings demonstrate that two distinct phases of virus-induced NF- Kappa B regulation are required to efficiently activate host cell apoptotic responses to reovirus infection.

ANSWER 3 OF 6 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED. on

PASCAL

STN

2000-0247593 ACCESSION NUMBER:

Mass transfer of a penetrant plasticizer/simple gas TITLE (IN ENGLISH):

mixture in a block copolymer

SEMENOVA S. I.; SMIRNOV S. I. AUTHOR:

Vladipore Research JSC, Vladimir, Russian Federation CORPORATE SOURCE:

SOURCE: Journal of Membrane Science, (2000), 168(1), 167-173,

8 refs.

ISSN: 0376-7388

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic COUNTRY: Netherlands

LANGUAGE: English AVAILABILITY: INIST-17232

AN2000-0247593 PASCAL

Mass transfer of a penetrant plasticizer/simple gas mixture in block AΒ copolymers with a flexible fragment and rigid fragment, the latter containing active groups that enter into donor-acceptor relation with the penetrant plasticizer, was investigated for the case of the systems comprising a mixture of SO2-N2/polyether (polyester) urethanes or polyether (polyester) urethane urea, polyarylate siloxanes having a block structure. Permeation of SO2 and N2 in the block copolymers has been found to proceed through various fragments of polymer macromolecules.

L25 ANSWER 4 OF 6 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.

(2006) on STN

ACCESSION NUMBER: 1998:36136 AGRICOLA

DOCUMENT NUMBER: IND20799746

TITLE: Development of a helium atmosphere soil incubation

technique for direct measurement of nitrous oxide and

dinitrogen fluxes during denitrification.

AUTHOR(S): Scholefield, D.; Hawkins, J.M.B.; Jackson, S.M. SOURCE:

Soil biology & biochemistry, Sept/Oct 1997. Vol. 29,

No. 9/10. p. 1345-1352

Publisher: Oxford : Elsevier Science Ltd.

CODEN: SBIOAH; ISSN: 0038-0717

NOTE: Includes references

PUB. COUNTRY: England; United Kingdom

DOCUMENT TYPE: Article FILE SEGMENT: Non-U.S. Imprint other than FAO

LANGUAGE: English

A technique is described in which the upper surfaces of intact soil cores are enveloped in a flowing atmosphere of He and O2 after first purging the soil and incubation vessel free from N2. This allows the independent measurement of N2O and N2 fluxes during denitrification of added or indigenous N03(-)-N by direct flushing to twin gas chromatographs and without recourse to acetylene blocking. Square section cores are extracted from random locations in the field and assembled without air gaps to make composite turves in the incubation vessel, thus preserving field aerobicity and orientation but allowing the spatial variability in denitrification to be accommodated. An N2-free irrigation assembly attached to each incubation vessel can be used to apply substrates during an experimental run, which is conducted in a temperature-controlled room. Use of the technique is demonstrated with measurements of N2O and N2 efflux from a wet, fine-textured soil under grassland management amended with nitrate and glucose. Peak concentrations were registered earlier than with previously-reported incubation techniques, with the flow rate of the incubation atmosphere having a substantial influence on the N2O to N2 ratio. Inclusion of acetylene as a component of the gas flow mixture stimulated denitrification and did not block N2 production completely. Application of the technique is limited by the extent to which atmospheric N2 contamination can be reduced and ultimately by the sensitivity of the gas chromatograph. The system in its present form has a detection limit for N2 from denitrification of about 50 g N $\,$ ha-1 d-1 and is therefore most suitably applied to soils under productive agricultural management.

L25 ANSWER 5 OF 6 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED. on

STN

AUTHOR:

AΒ

ACCESSION NUMBER: 1995-0589198 PASCAL

COPYRIGHT NOTICE: Copyright .COPYRGT. 1995 INIST-CNRS. All rights

reserved.

TITLE (IN ENGLISH): Determination of myoglobin saturation of frozen

specimens using a reflecting cryospectrophotometer

VOTER W. A.; GAYESKI T. E. J.

CORPORATE SOURCE: Univ. Rochester medical cent., dep. anesthesiology,

Rochester NY 14642, United States

SOURCE: American journal of physiology. Heart and circulatory

physiology, (1995), 38(4), H1328-H1341, 33 refs.

ISSN: 0363-6135 CODEN: AJPPDI

DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States

LANGUAGE: English

AVAILABILITY: INIST-670D, 354000050338330190

AN 1995-0589198 PASCAL

CP Copyright .COPYRGT. 1995 INIST-CNRS. All rights reserved.

This report describes a method and instrumentation for determining myoglobin (Mb) oxygen saturation in skeletal muscle. Canine gracilis is frozen in situ using a liquid N2-cooled copper block.

Transverse section surfaces of frozen unstained muscle are observed at -110°C using a microspectrophotometric system. The Mb saturation is determined using epi-illumination and a four-wavelength optical method. A special aperture permits illumination of a 20-µm-square area, and the radius of the catchment volume is estimated to be .eqvsim. 60 µm, with the strongest signal arising from the central region. The equibestic wavelengths used were 546.6, 570.5, and 584.1 nm. The method was validated using the nonlinear multicomponent analysis method of Luebbers. End-point (0 and 100% saturation) calibration was set using ischemic and adenosine-treated highly oxygenated muscles, respectively. The effects of hemoglobin (Hb) and metmyoglobin (metMb) signal contamination were evaluated experimentally and by computer-mixing simulations. Mb saturation determinations adjacent to large vessels are to be avoided. MetMb and capillary Hb do not interfere with the determination. The reproducibility of the method is estimated to be ± 5%.

Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.

(2006) on STN

AUTHOR (S):

NOTE:

95:11952 AGRICOLA ACCESSION NUMBER:

DOCUMENT NUMBER: IND20443867

Partial characterization of volatile fungistatic TITLE:

> compound(s) from soil. Liebman, J.A.; Epstein, L.

University of California, Berkeley CORPORATE SOURCE:

DNAL (464.8 P56) AVAILABILITY:

Phytopathology, May 1994. Vol. 84, No. 5. p. 442-446 SOURCE:

Publisher: St. Paul, Minn. : American

Phytopathological Society, 1911-CODEN: PHYTAJ; ISSN: 0031-949X

Includes references Minnesota; United States PUB. COUNTRY:

DOCUMENT TYPE: Article

FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension

LANGUAGE: English

Many soils contain volatile, water-soluble compound(s) that inhibit germination of Cochliobolus victoriae conidia in the absence of a carbon source. The volatile fungistatic compound(s) from soil were separated into a cell-free extract. Loss of fungistatic activity from the extract was time- and temperature-dependent; all activity was lost within 5 min at 90 C, 48 h at 21 C, and 5 days at -70 C. Much of the fungistatic activity was lost after the soil extract was diluted by 10%, incubated in an uncapped vial, or transferred to a new vial via a gas-tight syringe. Fungistatic activity was not detected in material collected from soil into a liquid N2 cold trap. Agarose blocks adjusted to pH 5.5-8.0 became fungistatic when incubated on soil, suggesting that the fungistatic compound(s) were relatively unaffected by hydrogen ion concentrations in this range. Carbon monoxide (CO), carbon dioxide (CO2), nitric oxide (NO), nitrogen dioxide (NO2), sulfur dioxide (SO2), ammonia (NH3), ethylene (C2H4), and reduced concentrations of oxygen (O2) apparently were not responsible for fungistasis of C. victoriae conidia in soil because these compounds were not fungistatic at concentrations detected in soil.

=> scFv and fragment and region and MISSING TERM AFTER REGION AND Operators must be followed by a search term, L-number, or query name.

```
=> scFv and fragment and region
            7 FILE AGRICOLA
L26
L27
           298 FILE BIOTECHNO
             0 FILE CONFSCI
L28
             0 FILE HEALSAFE
L29
L30
             O FILE IMSDRUGCONF
           179 FILE LIFESCI
L31
           145 FILE PASCAL
```

TOTAL FOR ALL FILES

629 SCFV AND FRAGMENT AND REGION

=> 133 and N2

0 FILE AGRICOLA L34 L35 0 FILE BIOTECHNO L36 0 FILE CONFSCI L37 O FILE HEALSAFE L38 0 FILE IMSDRUGCONF L39 0 FILE LIFESCI L40 0 FILE PASCAL

TOTAL FOR ALL FILES

0 L33 AND N2

=> kufer p/au

L42 0 FILE AGRICOLA 14 FILE BIOTECHNO

```
L44
            2 FILE CONFSCI
            O FILE HEALSAFE
L45 ·
'AU' IS NOT A VALID FIELD CODE
L46
            0 FILE IMSDRUGCONF
L47
            16 FILE LIFESCI
L48
             8 FILE PASCAL
TOTAL FOR ALL FILES
            40 KUFER P/AU
=> raum t/au
             0 FILE AGRICOLA
L50
L51
             3 FILE BIOTECHNO
             4 FILE CONFSCI
L52
             0 FILE HEALSAFE
L53
'AU' IS NOT A VALID FIELD CODE
            0 FILE IMSDRUGCONF
L54
L55
             2 FILE LIFESCI
             2 FILE PASCAL
L56
TOTAL FOR ALL FILES
            11 RAUM T/AU
=> 149 and 157
L58
           0 FILE AGRICOLA
            3 FILE BIOTECHNO
L59
            0 FILE CONFSCI
L60
            0 FILE HEALSAFE
L61
            0 FILE IMSDRUGCONF
L62
            2 FILE LIFESCI
L63
L64
            0 FILE PASCAL
TOTAL FOR ALL FILES
            5 L49 AND L57
L65
=> dup rem
ENTER L# LIST OR (END):165
DUPLICATE IS NOT AVAILABLE IN 'IMSDRUGCONF'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L65
              3 DUP REM L65 (2 DUPLICATES REMOVED)
L66
=> d 166 ibib abs total
     ANSWER 1 OF 3 BIOTECHNO COPYRIGHT 2006 Elsevier Science B.V. on STN
ACCESSION NUMBER:
                         2002:34602073
                                        BIOTECHNO
TITLE:
                         In vitro and in vivo activity of MT201, a fully human
                         monoclonal antibody for pancarcinoma treatment
AUTHOR:
                         Naundorf S.; Preithner S.; Mayer P.; Lippold S.; Wolf
                         A.; Hanakan F.; Fichtner I.; Kufer P.;
                         Raum T.; Riethmuller G.; Baeuerle P.A.; Dreier
CORPORATE SOURCE:
                         P.A. Baeuerle, Micromet AG, Am Klopferspitz 19, 82152
                         Martinsried, Germany.
                         E-mail: patrick.baeuerle@micromet.de
SOURCE:
                         International Journal of Cancer, (01 JUL 2002), 100/1
                         (101-110), 44 reference(s)
                         CODEN: IJCNAW ISSN: 0020-7136
DOCUMENT TYPE:
                         Journal; Article
COUNTRY:
                         United States
LANGUAGE:
                         English
SUMMARY LANGUAGE:
                         English
     2002:34602073
                     BIOTECHNO
AB
     In our study, a novel, fully human, recombinant monoclonal antibody of
     the IgG1 isotype, called MT201, was characterized for its binding
     properties, complement-dependent (CDC) and antibody-dependent cellular
     cytotoxicity (ADCC), as well as for its in vivo antitumor activity in a
     nude mouse model. MT201 was found to bind its target, the epithelial cell
     adhesion molecule (Ep-CAM; also called 17-1A antigen, KSA, EGP-2,
```

GA733-2), with low affinity in a range similar to that of the clinically validated, murine monoclonal IgG2a antibody edrecolomab (Panorex®). MT201 exhibited Ep-CAM-specific CDC with a potency similar to that of edrecolomab. However, the efficacy of ADCC of MT201, as mediated by human immune effector cells, was by 2 orders of magnitude higher than that of edrecolomab. Addition of human serum reduced the ADCC of MT201 while it essentially abolished ADCC of edrecolomab within the concentration range tested. In a nude mouse xenograft model, growth of tumors derived from the human colon carcinoma line HT-29 was significantly and comparably suppressed by MT201 and edrecolomab. The fully human nature and the improved ADCC of MT201 with human effector cells will make MT201 a promising candidate for the clinical development of a novel pan-carcinoma antibody that is superior to edrecolomab. COPYRGT. 2002 Wiley-Liss, Inc.

L66 ANSWER 2 OF 3 BIOTECHNO COPYRIGHT 2006 Elsevier Science B.V. on STN

DUPLICATE

AUTHOR:

SOURCE:

AB

ACCESSION NUMBER: 2001:32592061 BIOTECHNO

TITLE: Bispecific single-chain antibodies as effective tools

for eliminating epithelial cancer cells from human

stem cell preparations by redirected cell cytotoxicity

Maletz K.; Kufer P.; Mack M.; Raum

T.; Pantel K.; Riethmuller G.; Gruber R.

CORPORATE SOURCE: R. Gruber, Institut fur Immunologie, Mediz. Polik.

Lud.-Maxi.-Univ. Munc., Ziemssenstr. 1, 80336 Munchen,

Germany.

E-mail: Rudolf.Gruber@pk-i.med.uni-muenchen.de

International Journal of Cancer, (01 AUG 2001), 93/3

(409-416), 37 reference(s) CODEN: IJCNAW ISSN: 0020-7136

DOCUMENT TYPE: Journal; Article COUNTRY: United States

LANGUAGE: English SUMMARY LANGUAGE: English

SUMMARY LANGUAGE: English AN 2001:32592061 BIOTECHNO

High-dose chemotherapy (HDC) with autologous bone marrow or peripheral stem cell transplantation is discussed as one option to treat the extensive stage of a variety of tumors. Effective methods to eliminate contaminating tumor cells from human bone marrow or stem cell grafts may improve the outcome of the patients. We investigated 3 recombinant bispecific single-chain antibodies (bscAbs) directed against 17-1A (EpCAM), c-erbB-2 (HER-2/neu) and LeY on the one and CD3 on the other binding site for their ability to induce lysis of epithelial tumor cells by retargeting autochthonous T lymphocytes present in bone marrow mononuclear cells (BMMC) and in peripheral stem cell mononuclear cells (PSMC). The bscAbs showed remarkable specific lysis of different epithelial tumor cell lines with BMMCs as well as with PSMCs as effector cells. Investigation of the $\alpha17-1A-\alpha CD3$ bscAb revealed a significant correlation between the percentage of CD3.sup.+ cells present in the BMMCs and the rate of lysis as well as the absence of detrimental effects on the viability of hematopoietic progenitor cells as determined by colony-forming unit assays (CFUs). Our results indicate that recombinant bispecific single-chain antibodies could be new tools for purging of human bone marrow and peripheral stem cell grafts from contaminating epithelial cancer cells for patients receiving autologous stem cell transplantation after HDC. . COPYRGT. 2001 Wiley-Liss, Inc.

L66 ANSWER 3 OF 3 BIOTECHNO COPYRIGHT 2006 Elsevier Science B.V. on STN

DUPLICATE

ACCESSION NUMBER: 2001:32480558 BIOTECHNO

TITLE: Anti-self antibodies selected from a human IgD heavy

chain repertoire: A novel approach to generate

therapeutic human antibodies against tumor-associated

differentiation antigens

AUTHOR: Raum T.; Gruber R.; Riethmuller G.;

Kufer P.

CORPORATE SOURCE: P. Kufer, Institut fur Immunologie, Goethestrasse 31,

80336 Munich, Germany.

E-mail: Kufer@ifi.med.uni-muenchen.de

SOURCE: Cancer Immunology, Immunotherapy, (2001), 50/3

(141-150), 43 reference(s) CODEN: CIIMDN ISSN: 0340-7004

DOCUMENT TYPE:

Journal; Article

COUNTRY: Germany, Federal Republic of

LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2001:32480558 BIOTECHNO

Human antibodies were isolated by phage display from a naturally expressed human antibody repertoire. Antibody selection was carried out against the epithelial cell adhesion molecule (EpCAM) or 17-1A antigen, that in a clinical trial had been successfully used as a target for antibody therapy of minimal residual colorectal cancer. VH chains were selected from the human IqD repertoire expressed on naive B2 and autoreactive B1 lymphocytes. By quiding the selection through a murine template antibody, two EpCAM-specific human antibodies, HD69 and HD70, were obtained that closely resembled the murine therapeutic 17-1A antibody in their binding properties when expressed as complete huIgG1 molecules in CHO cells. However, both human antibodies recruited human cytotoxic effector cells far more efficiently than the murine 17-1A antibody used for clinical trials. Therefore, and in view of the long in vivo half-life of human IgG1 antibodies, HD69 and HD70 are regarded as highly promising third generation versions of the murine therapeutic antibody. Because of their origin from an evolutionary conserved germline VH repertoire, they are expected to exhibit minimal immunogenicity in patients.

TOTAL FOR ALL FILES

L74 15 PHAGE AND DOMAIN AND N2

```
=> 174 and library
```

L75 0 FILE AGRICOLA
L76 0 FILE BIOTECHNO
L77 0 FILE CONFSCI
L78 0 FILE HEALSAFE
L79 0 FILE IMSDRUGCONF
L80 0 FILE LIFESCI
L81 1 FILE PASCAL

TOTAL FOR ALL FILES

L82 1 L74 AND LIBRARY

=> d 181 ibib abs total

L81 ANSWER 1 OF 1 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER:

2002-0423692 PASCAL

COPYRIGHT NOTICE:

Copyright .COPYRGT. 2002 INIST-CNRS. All rights

reserved.

TITLE (IN ENGLISH):

A co-expression system based on phage and

phagemid to select cognate antibody-antigen pairs in

vivo

AUTHOR:

SOURCE:

HU XUEJUN; ZHANG ZHICHAO; YUAN XIAODONG; BAO YONGMING;

AN LIJIA

CORPORATE SOURCE:

Department of Bioengineering, Dalian University of Technology, Dalian 116012, China; Takara Biotechnology

Dalian, Co. Ltd., 116600, China

High technology letters, (2002), 8(2), 5-10, 19 refs.

ISSN: 1006-6748

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic China COUNTRY: LANGUAGE: English

AVAILABILITY: INIST-26311, 354000108788750020

PASCAL 2002-0423692

CP

AB

Copyright .COPYRGT. 2002 INIST-CNRS. All rights reserved. A modified selectively-infective phage (SIP) is developed to facilitate the selection of interacting antibody-antigen pairs from a large single-chain antibody (scFv) library in vivo. The system is constructed with a modified helper phage M13KO7 and phagemid pCANTAB 5 E. The antigen fused to the C-terminal of N1-N2 domain and the scFv to the N-terminal of CT domain of the qIIIp of filamentous phage are encoded on the phage and phagemid vectors respectively. The phages produced by co-transformants restore infectivity via interaction between antigen and antibody fusions in the cell periplasm. In a model system, the scFv fragment of the anti-hemagglutinin 17/9 antibody and its corresponding antigen are detected in the presence of a 10.sup.5 fold excess of a non-interacting control pairs, which demonstrates this system to be very sensitive and facile to screen a large single-chain antibody

```
=> 174 and scfv
           0 FILE AGRICOLA
            0 FILE BIOTECHNO
L84
            0 FILE CONFSCI
L85
            0 FILE HEALSAFE
L86
            0 FILE IMSDRUGCONF
L87
             0 FILE LIFESCI
L88
L89
             1 FILE PASCAL
TOTAL FOR ALL FILES
```

library.

1 L74 AND SCFV L90

=> 174 and fused 0 FILE AGRICOLA L91 L92 1 FILE BIOTECHNO 0 FILE CONFSCI L93 O FILE HEALSAFE L94 0 FILE IMSDRUGCONF L95 1 FILE LIFESCI L96 1 FILE PASCAL L97

TOTAL FOR ALL FILES L98 3 L74 AND FUSED

=> dup rem ENTER L# LIST OR (END):198 DUPLICATE IS NOT AVAILABLE IN 'IMSDRUGCONF'. ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE PROCESSING COMPLETED FOR L98 2 DUP REM L98 (1 DUPLICATE REMOVED)

=> d l99 ibib abs total

ANSWER 1 OF 2 BIOTECHNO COPYRIGHT 2006 Elsevier Science B.V. on STN

DUPLICATE

2002:34413748 BIOTECHNO

ACCESSION NUMBER: TITLE:

SOURCE:

In vivo selectively infective phage as a

tool to detect protein interactions: Evaluation of a novel vector system with yeast Ste7p-Fus3p interacting

proteins

AUTHOR:

Hertveldt K.; Robben J.; Volckaert G. K. Hertveldt, Laboratorium voor Gentechnologie, CORPORATE SOURCE:

Kasteelpark Arenberg 21, B-3001 Leuven, Belgium. E-mail: Kirsten.Hertveldt@agr.kuleuven.ac.be

Yeast, (2002), 19/6 (499-508), 31 reference(s) CODEN: YESTE3 ISSN: 0749-503X

DOCUMENT TYPE: Journal; Article COUNTRY: United Kingdom

LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2002:34413748 BIOTECHNO

The selectively infective phage (SIP) approach allows rapid identification of interacting proteins by linking protein-protein interaction to phage infectivity. Infection of E. coli by filamentous phage depends on viral g3p. This protein consists of three domains, N1, N2 and CT. Phages lacking the N1 domain are non-infective unless a bait (X)-prey (Y) interaction links it to phage anchored N2-CT domains. We have developed all the vectors required for an in vivo selectively infective phage strategy (SIP). This includes a bait vector, pG3N1, a prey vector, pHOS41, and a gene III deletion helper phage, HPd3. The bait vector pG3N1 allows expression of a bait protein (X) fused to the C-terminus of the N1 domain. The prey vector pHOS41 allows expression of type (Y) proteins, fused to the N-terminus of the N2-CT domains. The gene III deletion helper phage delivers all phage proteins necessary for phage production, except g3p. Escherichia coli transformed with these three vectors

all phage proteins necessary for phage production, except g3p. Escherichia coli transformed with these three vectors produces non-infective phages unless a bait-prey interaction links the g3p domains. Fus3p and Ste7p, two proteins from the Saccharomyces, cerevisiae pheromone-responsive pathway have been cloned to evaluate the SIP strategy. The presence of the interacting N1-Fus3p adapter increased the infectivity of Ste7p-N2-CT phages
.apprx. 1400-fold, which makes SIP a promising technology for the detection and further investigation of interacting proteins. Copyright

.COPYRGT. 2002 John Wiley & Sons, Ltd.

L99 ANSWER 2 OF 2 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2002-0423692 PASCAL

COPYRIGHT NOTICE: Copyright .COPYRGT. 2002 INIST-CNRS. All rights

reserved.

TITLE (IN ENGLISH): A co-expression system based on phage and

phagemid to select cognate antibody-antigen pairs in

vivo

AUTHOR: HU XUEJUN; ZHANG ZHICHAO; YUAN XIAODONG; BAO YONGMING;

AN LIJIA

CORPORATE SOURCE: Department of Bioengineering, Dalian University of

Technology, Dalian 116012, China; Takara Biotechnology

Dalian, Co. Ltd., 116600, China

SOURCE: High technology letters, (2002), 8(2), 5-10, 19 refs.

ISSN: 1006-6748

DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: China
LANGUAGE: English

AVAILABILITY: INIST-26311, 354000108788750020

AN 2002-0423692 PASCAL

library.

CP Copyright .COPYRGT. 2002 INIST-CNRS. All rights reserved.
AB A modified selectively-infective phage (SIP) is developed

A modified selectively-infective **phage** (SIP) is developed to facilitate the selection of interacting antibody-antigen pairs from a large single-chain antibody (scFv) library in vivo. The system is constructed with a modified helper **phage** M13KO7 and phagemid pCANTAB 5 E. The antigen **fused** to the C-terminal of N1-

N2 domain and the scFv to the N-terminal of CT

domain of the gIIIp of filamentous phage are encoded on the phage and phagemid vectors respectively. The phages produced by co-transformants restore infectivity via interaction between antigen and antibody fusions in the cell periplasm. In a model system, the scFv fragment of the anti-hemagglutinin 17/9 antibody and its corresponding antigen are detected in the presence of a 10.sup.5 fold excess of a non-interacting control pairs, which demonstrates this system to be very sensitive and facile to screen a large single-chain antibody